

**UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE**

FLATWORLD INTERACTIVES LLC, a )  
Pennsylvania limited liability company, )

Plaintiff, )

V.

**Civil action No.**

SAMSUNG ELECTRONICS CO., LTD., a  
Korean corporation; SAMSUNG  
ELECTRONICS AMERICA, INC., a New York  
corporation; SAMSUNG  
TELECOMMUNICATIONS AMERICA, LLC,  
a Delaware limited liability company,

Defendant. )

## JURY TRIAL DEMANDED

## COMPLAINT FOR PATENT INFRINGEMENT AND DEMAND FOR JURY TRIAL

Plaintiff FlatWorld Interactives LLC (“FlatWorld”), for its complaint against defendant Samsung Electronics Co. Ltd., Samsung Electronics America, Inc., and Samsung Telecommunications America LLC (collectively “Samsung” or “Defendants”), alleges as follows:

## I. NATURE OF THE ACTION

1. This is an action under the patent laws of the United States of America, 35 U.S.C. §§ 1, *et seq.*, for infringement of a patent assigned to FlatWorld.

## II. THE PARTIES

2. FlatWorld is a limited liability company, organized and existing under the laws of the State of Pennsylvania. FlatWorld’s principal place of business is in Villanova, Pennsylvania. FlatWorld is the assignee of U.S. Patent No. 6,920,619 (the “‘619 Patent”) and U.S. Patent No. RE 43,318 (the “‘318 Patent”), entitled *User Interface for Removing an Object From a Display*. A copy of the ‘318 Patent is attached as Exhibit A.

3. Samsung Electronics Co., Ltd. (referred to individually herein as “SEC”) is a Korean corporation with its principal offices at 250, 2-ga, Taepyong-ro, Jung-gu, Seoul, 100-742, South Korea. On information and belief, SEC is South Korea’s largest company and one of Asia’s

largest electronics companies. SEC designs, manufactures, and provides to the U.S. and world markets a wide range of products, including consumer electronics, computer components and myriad mobile and entertainment products.

4. Samsung Electronics America, Inc. (referred to individually herein as “SEA”) is a New York corporation with its principal place of business at 105 Challenger Road, Ridgefield Park, New Jersey 07660. On information and belief, SEA was formed in 1977 as a subsidiary of SEC, and markets, sells, or offers for sale a variety of consumer electronics, including TVs, VCRs, DVD and MP3 players, and video cameras, as well as memory chips and computer accessories, such as printers, monitors, hard disk drives, and DVD/CD-ROM drives. On information and belief, SEA also manages the North American operations of Samsung Telecommunications America, Samsung Electronics Canada, and Samsung Electronics Mexico.

5. Samsung Telecommunications America, LLC (referred to individually herein as “STA”) is a Delaware limited liability company with its principal place of business at 1301 East Lookout Drive, Richardson, Texas 75081. On information and belief, STA was founded in 1996 as a subsidiary of SEC, and markets, sells, or offers for sale a variety of personal and business communications devices in the United States, including cell phones.

### **III. JURISDICTION AND VENUE**

6. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338, because this is a civil action for patent infringement arising under the Patent Laws of the United States, Title 35.

7. This Court has personal jurisdiction over Samsung because does business within, and has committed acts of infringement within, this judicial district.

8. Venue is proper in this judicial district under 28 U.S.C. §§ 1391 (b)(3), (c)(2), and (c)(3), and 1400(b), because at least one of the defendants was incorporated in the State of Delaware.

### **IV. THE PATENT-IN-SUIT**

9. Slavoljub (“Slavko”) Milekic, Ph.D. (“Professor Milekic”), is Professor of Cognitive Science & Digital Design at the University of the Arts in Philadelphia, Pennsylvania

(<http://www.uarts.edu/users/smilekic>). He holds a medical doctor degree and a Master of Science degree in Neuropsychology from the Belgrade School of Medicine in Belgrade, the former Yugoslavia, and a Ph.D. in Cognitive Science from the University of Connecticut, in Storrs, Connecticut. At the University of the Arts, he teaches in at least four different departments that include: Multimedia (courses: “Psychology of Human/Computer Interaction,” “Making iPhone & iPad apps the easy way”), Art Education (courses “Creative & Cognitive Development,” “Art & Inclusion,” “Interactive media”), Masters in Industrial Design (course: “Cognitive Science of Interaction Design”), and Liberal Arts (course: “Psychology of Touch”). Professor Milekic is the sole inventor of the subject matter claimed in the ‘318 Patent.

10. By written assignment from Professor Milekic, FlatWorld owns all right, title and interest in and to the ‘619 Patent and ‘318 Patent, including all rights arising thereunder, such as the right to bring suit and recover damages for past infringement.

## **V. BACKGROUND OF THE INVENTION**

11. While Professor Milekic was teaching in the Cognitive Science Department of Hampshire College, in Amherst, Massachusetts, he began experimenting with the use of touch screens in testing the cognitive development of children. He developed a testing tool with a touch screen programmed to allow children to directly manipulate or move objects on the screen, and “hide” them behind other objects. To his surprise, combining the physical activity of moving objects with a representation of real objects on the screen allowed children to relate more easily to the real objects represented by the digital images, and to use the screen more effectively.

12. Professor Milekic realized that this way of interacting with the digital medium, *i.e.*, through a touchscreen, opened a new range of possibilities for children to interact with computers. He began looking for other ways to implement it. In so doing, he noticed a call for proposals for a conference called “*Museums and the Web*,” dealing with art and the digital medium. Professor Milekic wrote a theoretical paper outlining how to make digital information child-friendly, and presented the paper at the conference in March 1997. The presentation attracted considerable interest from museum professionals, some of whom subsequently contacted him and asked him to design such a system for their use.

13. At that time, museums had begun digitizing their collections. Digitized collections contained tens of thousands of images, organized like a database, searchable by artist, medium, *etc.* Although this made art collections digitally *available*, they were not very *accessible*, particularly for children. Professor Milekic began observing children to learn how they dealt with large numbers of items during play, for example, when putting together a large puzzle. He noted that children use a simple strategy: they (a) look for particular pieces that satisfy a criterion, for example, they look for a blue-colored piece of the puzzle if a missing piece is part of the “sky,” (b) pick up blue pieces in their vicinity and examine them, and (c) if they do not fit, throw them away.

14. Professor Milekic realized that repeated exposure to individual items belonging to the same category leads to creation of a “mental prototype,” which permits one to recognize an unknown exemplar and classify it in the correct prototypical category. For example, when a child is exposed to dogs of different breeds, he or she forms a mental prototype of “doggedness,” which permits the child to identify an unknown breed as belonging to the “dog category.” Professor Milekic decided to apply the same principle to virtual galleries of digital art museum collections. Art could be organized into child-friendly categories, such as “faces” or “flowers.” Using a touchscreen, a child could “browse” a category of digital images of works of art, and “throwing away” a digital image would change the category to a different category of digital images of works of art. He believed that this system would teach a child to distinguish between different categories of painting styles, such as impressionism, cubism, pointillism, *etc.* Then later, when presented with an unknown work of art, the child would be able to place the work into its proper category, as do art historians.

15. Following these principles, Professor Milekic agreed to design such a touchscreen system for the Speed Art Museum, in Louisville, Kentucky. In so doing, Professor Milekic realized that the touchscreen interface he was designing was unlike anything that had come before it. At that time, touchscreen applications were used primarily as panels of “buttons,” *i.e.*, users would touch a certain area of the screen as if pushing a button. There were at most only rudimentary forms of gesture recognition on touch screens at that time.

16. On August 28, 1997, Professor Milekic filed Provisional Application No. 60/057,117. On June 12, 1998, he filed the non-provisional patent application that matured into the '619 Patent, which was duly and lawfully issued on July 19, 2005, claiming priority from the date of the provisional application.

17. One example of a claim of the '619 Patent is Claim 1, which recites a system with a "pointing device" (for example, a touch screen), coupled to a computer, in which images may be removed with a flick of the pointing device (such as a finger), as follows:

A system for manipulating images comprising:

A screen upon which an image is displayed; and

A computer coupled to the screen, the computer causing the images to be manipulated in response to location inputs from a pointing device, the system being characterized in that:

When the image is being dragged in response to the location inputs and the system detects that the velocity with which the image is being dragged exceeds a threshold velocity, the system responds by removing the image from the display without leaving any representative thereof in the display.

18. FlatWorld was formed on January 25, 2007, for the purpose of promoting and commercializing the inventions claimed in the '619 Patent. For that purpose, Professor Milekic assigned the patent to FlatWorld. On July 18, 2007, FlatWorld filed reissue patent application 11/779,310, and the patent reissued on April 17, 2012 as U.S. Patent No. RE 43,318.

19. FlatWorld has installed additional touchscreens according to the inventions claimed in the original '619 Patent and reissue '318 Patent in March, 2008 for the Pennsylvania Horticultural Society's Flower Show, and in July, 2009 for the Philadelphia Zoo Snow Leopard Interactive Exhibit.

## **VI. NOTICE OF THE PATENT**

20. Samsung received notice of RE 43,318, at the latest, upon service of the complaint, herein.

## **VII. BACKGROUND OF THE INFRINGEMENT**

21. Samsung's infringement of the FlatWorld patent provides Samsung with unique functionality for its product that was the result of Professor Milekic's innovation and not Samsung's.

22. Samsung announced its Galaxy line of Android based smart phones in March of 2010:



23. Samsung announced the introduction of its Galaxy S<sup>®</sup> Aviator<sup>™</sup> Android Smartphone on July 21, 2010:



24. Samsung announced the introduction of its Samsung Fascinate<sup>™</sup> Android Smartphone on September 8, 2010:



25. Samsung announced the introduction of its Galaxy Note Android Smartphone on February 12, 2012, and sold 5 million units in the first quarter:



26. Samsung introduced the Galaxy S™ II Android Smartphone on September 16, 2011, and has sold at least 15 million units:



27. Samsung introduced the Samsung Galaxy S® Blaze™ 4G Android Smartphone on March 21, 2012:



28. Samsung introduced the Samsung Galaxy S™ II Skyrocket™ Android Smartphone on November 6, 2011:



29. Samsung introduced the Samsung Galaxy S™ II, Epic™ 4G Touch Android Smartphone on September 16, 2011:



30. Samsung introduced the Samsung Stratosphere™ Galaxy S Android Smartphone on October 13, 2011:





31. Samsung had a 24% share of the smart phone market in 2011, making it the world's largest seller of smart phones. It sold over 45 million smart phones in the first quarter of 2012, alone.

32. Samsung has also sold tablets that have touchscreens and that allow images to be dragged, flicked, thrown and discarded, as described above. These tablets include the Galaxy Tab<sup>®</sup> of which over 2 million units have been sold.



33. Samsung also uses infringing touchscreen technology and gesture recognition technology in its Galaxy Player MP3 player:



34. Each of the foregoing Samsung articles forms a system and apparatus that incorporates elements meeting all of the limitations of one or more claims of the '318 Patent. As an example only, and not by way of limitation, each of the foregoing Samsung articles is a system comprising a screen and a computer, with a pointing device that manipulates images on the screen, in which when one or more images is dragged at a velocity that exceeds a threshold velocity, the system responds by removing the image(s) from the screen without leaving a representative of the image on the screen.

## **COUNT I**

### **INFRINGEMENT OF THE '318 PATENT**

35. FlatWorld re-alleges and incorporates herein by reference the foregoing allegations as if fully set forth herein.

36. Samsung has been and continues to directly infringe (literally or under the doctrine of equivalents) one or more claims of the '318 Patent by making, using, offering for sale, selling and/or importing into the United States articles having elements that meet all of the limitations of the infringed claims. By way of illustration only, these infringing Samsung articles include, but are not limited to, the following:

<b><u>Phone</u></b>
Galaxy Nexus Android Smartphone
Galaxy S® Aviator™ Android Smartphone
Samsung Fascinate™ Android Smartphone

Samsung Galaxy Note
Samsung Galaxy S II
Samsung Galaxy S® Blaze™ 4G Android Smartphone
Samsung Galaxy S™ II Skyrocket™ Android Smartphone
Samsung Galaxy S™ II, Epic™ 4G Touch
Samsung Stratosphere™ a Galaxy S phone
<b><u>Tablets</u></b>
Samsung Galaxy Tab™
<b><u>Media Player</u></b>
Samsung Galaxy Player

37. Samsung has also actively, knowingly, and intentionally induced, and continues to actively, knowingly, and intentionally induce, infringement of the ‘318 Patent by making, using, offering for sale, importing, and selling the illustrative Samsung articles listed above in Paragraph 36 (the “Samsung Articles”); with knowledge that its customers and end users will use, market, sell, offer to sell, and import the Samsung Articles; and with knowledge and specific intent to encourage and facilitate those infringing sales and uses of Samsung Articles through the creation and dissemination of promotional and marketing materials, instructional materials, product manuals, and technical materials.

38. Samsung’s infringement of the ‘318 Patent has been on a massive scale, and has taken place with actual knowledge of the inventions claimed therein.

39. As a result of Samsung’s infringement of the ‘318 Patent, FlatWorld has been and will continue to be irreparably harmed unless and until Samsung’s infringement is enjoined by this Court.

40. As a result of Samsung’s infringement of the ‘318 Patent, FlatWorld has been and will continue to be damaged in an amount to be proved at trial, but not less than a reasonable royalty for each infringement.

### **PRAYER FOR RELIEF**

Wherefore, FlatWorld respectfully requests that this Court:

- A. Enter a judgment in favor of FlatWorld that Samsung has infringed one or more claims of the '318 Patent;
- B. Grant a permanent injunction enjoining Samsung, its officers, directors, agents, servants, affiliates, employees, successors, assigns, divisions, branches, subsidiaries, parents, and all others acting in active concert therewith, from infringing and/or inducing others to infringe or contribute to the infringement of the '318 Patent;
- C. Award FlatWorld damages in an amount sufficient to compensate for Samsung's infringement of the '318 Patent in an amount to be proved at trial, but not less than a reasonable royalty;
- D. Award prejudgment and postjudgment interest to FlatWorld under 35 U.S.C. § 284;
- E. If supported by the evidence, award increased damages, under 35 U.S.C. § 284, in an amount not less than three times the amount of actual damages awarded to FlatWorld;
- F. If supported by the evidence, declare this case exceptional under 35 U.S.C. § 285 and award FlatWorld reasonable attorney's fees; and
- G. Grant FlatWorld such other and further relief as this Court deems just and equitable.

### **DEMAND FOR JURY TRIAL**

FlatWorld hereby demands a trial by jury on all issues so triable.

FARNAN LLP

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